

We claim:

1. An articulated work vehicle comprising:
 - a first frame;
 - a second frame disposed longitudinally in line with the first frame and pivotally coupled thereto to pivot about a substantially vertical axis with respect to the first frame;
 - an engine fixed to one of the first and second frames;
 - at least one hydraulic pump coupled to and driven by the engine to produce hydraulic fluid pressure; and
 - at least one hydraulic actuator fluidly coupled to the at least one hydraulic pump and mechanically coupled to and between the first and second frames to pivot the frames about the vertical axis, wherein the at least one actuator is configured to increase the effective steering pressure to an elevated pressure level when the first and second frames are within five degrees of mechanical abutment.
2. The articulated work vehicle of claim 1, wherein the at least one actuator increases the effective steering pressure by throttling fluid flow leaving the actuator, and further wherein the at least one pump is a variable displacement pump that is responsive to elevated hydraulic pressure provided by the elevated steering pressure.
3. The articulated work vehicle of claim 2, wherein the at least one actuator includes a hydraulic cylinder having a cylinder body slidably containing a piston, the cylinder body having an opening, the opening being disposed to conduct fluid out of the cylinder body as the first and second frames move toward abutment, and further wherein a priority circuit is fluidly coupled between the pump and the cylinder.
4. The articulated work vehicle of claim 2, wherein the actuator is a hydraulic cylinder having a reciprocable piston and at least two fluid flow paths past the piston and out of the cylinder, wherein the effective steering pressure is increased by blocking or highly restricting at least one of the two fluid flow paths out of the cylinder.

5. The articulated work vehicle of claim 2, wherein the first and second frames are mechanically constrained to pivot through a total angular range of at least 60 degrees.

6. The articulated work vehicle of claim 4, wherein the hydraulic actuator can pivot the frames with respect to each other at a rate of at least 5 degrees per second.

7. A work vehicle, comprising:
a front frame;
a rear frame disposed behind the front frame and pivotally coupled thereto;
an engine fixed to one of the front and rear frames;
a hydraulic pump mechanically coupled to and driven by the engine;
and
at least one hydraulic actuator fluidly coupled to the hydraulic pump and mechanically coupled to and between the front and rear frames to pivot the front and rear frames with respect to each other, wherein the at least one actuator is configured to mechanically increase a steering load to an elevated load level when the first and second frames approach mechanical abutment.

8. The work vehicle of claim 7, wherein the at least one actuator is configured to increase the steering pressure by throttling fluid flow leaving the at least one actuator, and further wherein the pump is a variable displacement pump having a displacement, the pump being responsive to elevated hydraulic pressure produced when the steering pressure is increased by the throttling of fluid flow.

9. The work vehicle of claim 8, wherein the at least one actuator includes a hydraulic cylinder having a piston disposed in an elongate cylindrical body, the cylindrical body having an opening in a wall thereof, the opening being disposed to conduct hydraulic fluid out of the cylindrical body as the front and rear frames approach abutment.

10. The work vehicle of claim 8, wherein the at least one actuator is a hydraulic cylinder configured to increase the steering pressure by blocking or highly restricting at least one of at least two parallel fluid flow paths out of the cylinder as the frames approach abutment.
11. The work vehicle of claim 8, wherein the front and rear frames are mechanically constrained to pivot through a total angular range of at least 60 degrees.
12. The work vehicle of claim 10, wherein the at least one actuator can pivot the frames with respect to each other at a rate of at least 5 degrees per second.
13. An articulated work vehicle comprising:
 - a front frame;
 - a rear frame disposed behind the front frame and pivotally coupled thereto;
 - an engine fixed to one of the front or rear frames;
 - a hydraulic pump mechanically coupled to and driven by the engine;
 - and
 - at least one hydraulic actuator fluidly coupled to the hydraulic pump and mechanically coupled to and between the front and rear frames to pivot the frames with respect to each other, wherein the at least one actuator is adapted to mechanically increase a steering pressure by throttling fluid flow through the actuator when the front and rear frames are within at least ten degrees of abutting one another.
14. The articulated work vehicle of claim 13, wherein the at least one actuator is configured to increase the steering load pressure by throttling fluid flow leaving the at least one actuator, and further wherein the pump is a variable displacement pump having a displacement, the pump being responsive to elevated hydraulic pressure produced when the steering load is increased.
15. The articulated work vehicle of claim 13, wherein the at least one actuator includes a hydraulic cylinder having a piston with at least one discrete fluid flow path therethrough and an elongate cylindrical body, the cylindrical body having an opening

in a wall thereof adjacent to a rod end of the cylinder, the opening being disposed to conduct fluid out of the cylindrical body as the front and rear frames approach abutment.

16. The articulated work vehicle of claim 15, wherein the at least one actuator is a dual-ported hydraulic cylinder and wherein the steering load is increased by limiting fluid flow leaving the cylinder to the at least one discrete fluid flow path.

17. The work vehicle of claim 14, wherein the front and rear frames are mechanically constrained to pivot through a total angular range of at least 60 degrees.

18. The work vehicle of claim 17, wherein the at least one actuator can pivot the frames with respect to each other at a rate of at least 5 degrees per second.